

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
TerreStar Corporation Request for Relief of)	WT Docket No. 16-290
Certain 1.4 GHz Construction Requirements)	
)	

PETITION FOR RECONSIDERATION OF GE HEALTHCARE

Pursuant to Section 1.106 of the Federal Communications Commission’s (“FCC or “Commission”) rules,¹ GE Healthcare (“GEHC”) seeks reconsideration of the Order released by the Wireless Telecommunications Bureau (“WTB”) on October 10, 2017, in the above-captioned proceeding.² In that Order, the WTB denied TerreStar Corporation’s (“TerreStar”) request for a waiver of the requirement that it demonstrate substantial service with respect to all of its paired 1392-1395 and 1432-1435 MHz and unpaired 1390-1392 MHz band (collectively, the “1.4 GHz band”) licenses by April 23, 2017.³

As explained below, the WTB materially erred in denying TerreStar’s waiver request, notably by failing to consider the nation’s growing need for wireless medical telemetry capacity and the grave interference threat posed to safety-of-life Wireless Medical Telemetry Service

¹ See 47 C.F.R. § 1.106. GEHC has standing to file this petition for reconsideration because it was a party to the proceeding below and, as a manufacturer of WMTS equipment, has been adversely affected by the action taken. See *id.*; GEHC, Comments, WT Docket No. 16-290 (filed Oct. 4, 2016) (“GEHC Comments”).

² See *TerreStar Corporation Request for Temporary Waiver of Substantial Service Requirements for 1.4 GHz Licensees*, Order, DA 17-995 (WTB, rel. Oct. 10, 2017) (“*Order*”).

³ See *id.*; see also TerreStar, Request for Temporary Waiver of Substantial Service Requirements, WT Docket No. 16-290 (filed Sept. 15, 2016) (“*TerreStar Petition*”).

(“WMTS”) systems by TerreStar’s original business plan.⁴ The WTB should reconsider this decision because allowing TerreStar additional time to use its 1.4 GHz licenses to support wireless medical telemetry is in the public interest.

A. The Order failed to acknowledge the growing need for wireless medical telemetry spectrum.

GEHC and other commenters emphasized throughout this proceeding that the nation’s hospitals need additional wireless medical telemetry capacity.⁵ For example, the American Society for Healthcare Engineering of the American Hospital Association (“ASHE”) called the need “pressing” and explained that some areas of the country with many healthcare facilities are experiencing WMTS saturation due to a lack of 1.4 GHz spectrum.⁶ ASHE also observed that 8,000 WMTS deployments were in the 1.4 GHz band as of May 2017 and that the number of such deployments has increased approximately 20 percent per year since 2013.⁷ GEHC explained that the number of physical locations that use WMTS will likely increase significantly in the future as hospitals seek to better address the problems raised by an aging U.S. patient population and increased patient acuities.⁸ And Philips Healthcare (“Philips”) indicated that this issue “has become more urgent as interference threats . . . have emerged in the dedicated 600

⁴ The FCC acknowledges that reconsideration is appropriate where a petitioner shows “a material error or omission” in the decision or raises additional facts that were not previously known. *See, e.g., Comparative Consideration of 3 Groups of Mutually Applications for Permits to Construct New Noncommercial Educational FM Stations*, Memorandum Opinion and Order, 31 FCC Rcd 8007 ¶ 1 n.4 (2016).

⁵ *See, e.g.*, GEHC Comments at 2-3; Letter from Matt Pekarske, Principal Engineer – Wireless, GEHC, to Marlene H. Dortch, Secretary, FCC, WT Docket No. 16-290 (filed Aug. 4, 2017) (“GEHC August 2017 Letter”).

⁶ *See* Letter from Timothy Cooney, Counsel, ASHE, to Chairman Ajit Pai, FCC, WT Docket No. 16-290 (filed Jul. 14, 2017).

⁷ *See id.*

⁸ *See* GEHC Comments at 1-2; GEHC August 2017 Letter at 2.

MHz WMTS spectrum at the same [time] that the unlicensed ISM spectrum has become more crowded.”⁹

Despite this input from GEHC and others, the Order failed to acknowledge hospitals’ growing need for wireless medical telemetry capacity. Instead, the Order avoided the issue altogether, expressly “declin[ing] to address . . . whether, as a general matter, WMTS operators require access to additional spectrum.”¹⁰ That maneuver allowed the WTB to ignore a critical way in which granting TerreStar’s request would have furthered the public interest and is difficult to square with the Commission’s longstanding recognition of “the importance of the [WMTS] to patient care” and the “significant benefits” it offers to patients and healthcare providers.¹¹

B. The Order failed to acknowledge the unacceptable interference risk posed by TerreStar’s original business plan.

The record in this proceeding also demonstrates that TerreStar’s previously envisioned 1.4 GHz WiMAX Smart Grid network posed a significant interference threat to existing and future WMTS systems. GEHC, for example, cautioned that this system posed “an unacceptable risk” to WMTS systems even though it was arguably permitted under the FCC’s rules.¹² Philips studied the issue and concluded that the interference threat “is very real and of significant

⁹ See Philips, Comments, WT Docket No. 16-290, at 2 (filed Aug. 21, 2017).

¹⁰ See Order ¶ 16 n.54.

¹¹ See, e.g., *Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions*, Report and Order, 29 FCC Rcd 6567 ¶ 275 (2014); *Amendment of Parts 2 and 95 of the Commission’s Rules to Create a Wireless Medical Telemetry Service*, Order, 16 FCC Rcd 4543 ¶ 2 (2001).

¹² See GEHC August 2017 Letter at 1-2.

concern to the WMTS community.”¹³ And TerreStar explained that, after consulting with representatives from the WMTS community, it confirmed that smart-grid WiMAX operations in its licensed spectrum “would likely have a significant, deleterious impact on existing life-critical WMTS devices and systems” even if the operations complied with the FCC’s rules.¹⁴

The Order, however, found “no basis to conclude that execution of TerreStar’s now-abandoned business plan was not feasible”¹⁵ and expressed the WTB’s desire for “a more definitive demonstration that harmful interference will occur,” stating that “TerreStar fails to provide any technical support beyond its own assertions that WiMAX system operations could disrupt the protected operations of other adjacent band entities.”¹⁶ Here, again, the Order failed to give weight to a material factor in determining whether granting TerreStar’s request would have been in the public interest: TerreStar’s reason for changing its business plan.¹⁷ Moreover, the Order ignored the comments of GEHC and others on this issue,¹⁸ and provided TerreStar and its supporters with no additional opportunity to reinforce their interference claims with technical data – something that did not seem to be required prior to the Order’s release.¹⁹

¹³ See Philips, Reply Comments, WT Docket No. 16-290 (filed Oct. 14, 2016); Letter from

¹⁴ See Letter from Regina M. Keeney, Counsel, TerreStar, to Marlene H. Dortch, Secretary, FCC, WT Docket No. 16-290, at 2-4 (filed June 14, 2017) (“These WMTS representatives all expressed concern that high-power, smart-grid WiMAX operations in the commercial 1.4 GHz band would cause significant harmful interference to adjacent-band medical telemetry systems.”).

¹⁵ Order ¶ 13.

¹⁶ *Id.*

¹⁷ See, e.g., TerreStar Petition at ii-iii.

¹⁸ See Order ¶ 13.

¹⁹ Compare, e.g., *id.*; with *Wireless Telecommunications Bureau Seeks Comment Regarding TerreStar Corporation’s Request for Relief of Certain 1.4 GHz Construction Requirements*, Public Notice, DA 16-1029 (WTB, rel. Sept. 14, 2016).

For the foregoing reasons, the WTB should reconsider its initial decision and grant TerreStar's request for a limited waiver of the substantial service requirement for commercial wireless licenses in the 1.4 GHz band.

Respectfully submitted,

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